

REMARKS

In view of both the amendments presented above and the following discussion, the applicants submit that none of the claims now pending in the application is obvious under the provisions of 35 U.S.C. § 103. Thus, the applicants believe that all of these claims are now in allowable form.

Rejections

A. 35 U.S.C. § 103

The Examiner has rejected claims 1-20 as being unpatentable over various combinations of the Tepman '414 patent (United States patent 5,380,414 issued January 10, 1995), the Tepman '438 patent (United States patent 5,527,438 issued June 18, 1996), the Katsuki et al. patent (U.S. Patent 5,728,276 issued March 17, 1998), the Hsu patent (United States patent 5,589,039 issued December 31, 1996), the Boys et al. patent (United States patent 4,500,409 issued February 19, 1985), the Alex patent (United States patent 5,616,218 issued April 1, 1997) and applicants' admitted prior art. These rejections are respectfully traversed.

The Examiner states that these claims stand rejected for the reasons set forth in the previous Office Action (dated December 27, 1999).

The applicants have amended the claims such that the applicant's invention, as recited in claim 1 (as amended), is:

"An apparatus for depositing a magnetic film, comprising:

a sputtering chamber containing a target, a substrate support having a surface that is separated from the target, and a grounded collimator positioned between the target and the substrate support; and

an annular magnet array disposed within the chamber to form a stationary magnetic field that is substantially parallel to the surface of the substrate support".

(Emphasis added)

The teachings of Tepman '414, Tepman '438, Katsuki, Hsu, Boys, Alex and the applicants' admitted prior art, in any combination or singly, are devoid of an annular magnet array disposed within the chamber to form a stationary magnetic field that is substantially parallel the surface of the substrate support, as recited in applicants' claim 1 (as amended).

Since none of the cited art teaches an annular magnet array disposed within the chamber to form a stationary magnetic field at the surface of the substrate support, any combination of the references would lack such teaching. Therefore, the applicants submit that independent base claims 1, 6, and 15 are not obvious over Tepman '414, Tepman '438, Katsuki, Hsu, Boys, Alex and the applicants' admitted prior art and, as such, fully satisfy the requirements of 35 U.S.C. § 103 and are patentable thereunder.

In view of the patentability of independent base claims 1, 6 and 15, dependent claims 2-5, 7-8 and 16-20 which depend either directly or indirectly from base claims 1, 6, and 15 and recite additional features therefor are also patentable. As such and for at least the same reasons set forth above, the applicants submit that all of these dependent claims also fully satisfy the requirements of 35 U.S.C. § 103 and are patentable thereunder.

For the reasons stated above, the applicants submit that claims 1-20 all fully satisfy the requirements of 35 U.S.C. § 103 and are patentable thereunder. Therefore, The applicants respectfully request that the Examiner withdraw the rejection and allow the claims.

Conclusion

Thus, the applicants submit that none of the claims presently in the application is obvious under the provisions of 35 U.S.C. § 103. Consequently, the applicants believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Mr. Raymond R. Moser Jr., Esq. at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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